LISTING OF THE CLAIMS

This listing of the claims replaces and supersedes all previous listings:

1. (Currently Amended) An automated method of classifying a cytological sample, comprising:

providing a cytological sample in solution in a vessel;

optically interrogating the solution with at least one wavelength of light;

determining whether a result of said interrogation meets a criterion;

attaching a positive designator to the sample vessel if the result meets the criterion, wherein the positive designator designates the sample as satisfactory for preparing a specimen slide from the sample; and

attaching a manipulation designator to the sample vessel if the result does not meet the criterion, wherein the manipulation designator designates the sample as requiring a manipulation to render the sample adequate for slide preparation.

2-3. (Canceled)

4. (Currently Amended) The method of claim ~~2~~ 1, wherein the sample meets the criterion if it contains a sufficient quantity of cellular~~s~~ matter for performing a diagnostic evaluation of the specimen slide ~~the assay~~.

5. (Currently Amended) The method of claim 4, wherein the cellular~~s~~ matter comprises ~~are~~ prokaryotic, eukaryotic, or archea type cells.

6. (Previously Presented) The method of claim 1, wherein the positive designator indicates that the sample is satisfactory for automated slide preparation.

7. (Currently Amended) The method of claim 1, wherein the positive designator indicates that the sample is adequate in quantity to allow for withdrawal of a portion of the sample sufficient for performing ~~an assay~~ a diagnostic evaluation of the specimen slide.

8. (Currently Amended) The method of claim 1, wherein the manipulation designator indicates that acquisition of ~~an~~ additional cellular matter in the sample is needed for performing ~~an assay~~ a diagnostic evaluation of the specimen slide.

9. (Currently Amended) The method of claim 1, wherein the manipulation designator indicates that treatment of the sample is needed prior to performing ~~an assay~~ a diagnostic evaluation of the specimen slide.

10. (Original) The method of claim 9, wherein the treatment comprises adding acetic acid to the sample.

11. (Original) The method of claim 9, wherein the treatment comprises adding a reducing agent to the sample.

12. (Previously Presented) The method of claim 1, wherein the criterion is a concentration of cells in the sample.

13. (Previously Presented) The method of claim 1, wherein the criterion is a concentration of cells of a particular type in the sample.

14. (Original) The method of claim 13, wherein the cells are endocervical cells.

15. (Currently Amended) The method of claim 1, wherein the criterion is a level of blood or mucus in the sample.

16-20. (Canceled)

21. (Currently Amended) The method of claim 1, wherein the positive designator comprises a physical marking on the vessel.

22. (Original) The method of claim 1, wherein the positive designator comprises a designation in an electronic memory.

23. (Currently Amended) The method of claim 1, wherein the manipulation designator comprises a physical marking on the vessel.

24. (Original) The method of claim 1, wherein the manipulation designator comprises a designation in an electronic memory.

25. (Canceled)

26. (Currently Amended) The method of claim 1, ~~wherein the method is~~ performed in conjunction with obtaining the sample from a subject.

27. (Canceled)

28. (Original) The method of claim 1, wherein the sample is selected from the group consisting of blood; urine; semen; milk; sputum; mucus; plueral fluid; pelvic fluid; sinovial fluid; ascites fluid; a body cavity wash; eye brushing; skin scrapings; a buccal swab; a vaginal swab; a pap smear; a rectal swab; an aspirate; a needle biopsy; a section of tissue; plasma; serum; spinal fluid; lymph fluid; an external secretion of the skin, respiratory, intestinal, or genitourinary tract; tears; saliva; a tumor; an organ; a microbial culture; and an in vitro cell culture constituent.

29. (Original) The method of claim 1, wherein the sample comprises a water-soluble alcohol in an amount effective to preserve the sterility of the solution toward at least one contaminant.

30. (New) An automated method of classifying a cytological sample, comprising:

optically interrogating a cytological sample in solution using at least one wavelength of light;

determining, based on the interrogation, whether the sample has an adequate concentration of cellular matter needed for performing an intended assay;

associating a positive designator with the sample if the sample has an adequate concentration of cellular matter for performing the intended assay; and

associating a manipulation designator with the sample if the sample does not have an adequate concentration of cells to perform the intended assay,

wherein performance of the intended assay comprising preparing a specimen slide from said sample, and performing a diagnostic review of the specimen slide.

31. (New) The method of claim 30, wherein the positive designator indicates that the sample is satisfactory for automated slide preparation.

33. (New) The method of claim 30, wherein the cellular matter comprises cells of a particular type in the sample.

34. (New) The method of claim 30, performed in conjunction with obtaining the sample from a subject.

35. (New) An automated method of classifying a cytological sample suspended in solution, comprising:

optically interrogating the sample using at least one wavelength of light;

determining whether a result of said interrogation meets a criterion;

associating a positive designator with the sample if the result meets the criterion, wherein the positive designator designates the sample as satisfactory for performing an assay to detect the presence or absence of human papilloma virus; and

associating a manipulation designator with the sample if the result does not meet the criterion, wherein the manipulation designator designates the sample as requiring a manipulation to render the sample adequate before the assay can be performed.

36. (New) The method of claim 35, wherein the sample meets the criterion if the sample has a sufficient concentration of endocervical cells.

37. (New) The method of claim 35, wherein the sample meets the criterion if the sample does not exceed a threshold level of blood or urine content.

38. (New) The method of claim 35, wherein the manipulation designator indicates that treatment of the sample is needed prior to performing the diagnostic evaluation.

39. (New) The method of claim 38, wherein the treatment comprises adding acetic acid or a reducing agent to the sample.